

Claims

1. A method of cleaning crankcase gas generated during operation of an internal combustion engine (31; 41) in its crankcase,

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characterized by

- use of a centrifugal separator (34; 50) that includes a centrifugal rotor (8) arranged for rotation by means of a driving motor (9; 49) and arranged
10 by its rotation to suck crankcase gas from the crankcase to the centrifugal separator (34; 50),

- sensing of a parameter, the magnitude of which is related to the amount of crankcase gas generated per unit of time in the crankcase, and

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- changing of the rotational speed of the centrifugal rotor (8) in response to a sensed change of said parameter in a way such that the gas pressure in the crankcase is maintained at a predetermined value, or within a predetermined pressure interval, during the operation of the combustion
20 engine (31; 41).

2. A method according to claim 1, in which the rotational speed of the centrifugal rotor (8) is changed from a first value to a second value, both larger than nil.

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3. A method according to claim 1, in which the rotational speed of the centrifugal rotor (8) is changed stepwise in more than two steps.

4. A method according to claim 1, in which the rotational speed of the
30 centrifugal rotor (8) is changed continuously.

5 5. A method according to any one of the preceding claims, in which the rotational speed of the centrifugal rotor (8) is changed in response to a sensed change of a flow of crankcase gas, that is generated as a consequence of the production of crankcase gas by the combustion engine (31; 41).

10 6. A method according to any one of the claims 1-4, in which the rotational speed of the centrifugal rotor (8) is changed in response to a sensed change of an over pressure of the crankcase gas, which comes up as a consequence of the production of crankcase gas by the combustion engine (31; 41).

15 7. A method according to any one of the preceding claims, in which sensing is made of a parameter varying with the load on the combustion engine (31; 41).

20 8. A method according to any one of the preceding claims, in which an electric driving motor (49) is used for the rotation of the centrifugal rotor (8) and a frequency converter (48) is used for changing of the rotational speed of the driving motor (49) and, thereby, the speed of the centrifugal rotor (8).

25 9. A device for cleaning of crankcase gas generated during operation of an internal combustion engine (31; 41) in its crankcase, said device including a centrifugal separator (34, 50) having a centrifugal rotor (8) that is arranged for rotation by means of a driving motor (9; 49) and arranged by its rotation to suck crankcase gas from the crankcase to the centrifugal separator,

30 characterized in

- that the driving motor (9; 49) is arranged for rotation of the centrifugal rotor (8) at different speeds,
 - that sensing means (45) is arranged to sense a parameter, the magnitude of which is related to the amount of crankcase gas generated per
5 unit of time in the crankcase,
 - that said sensing means (45) is operatively connected with the driving motor (8, 49) and
 - that the driving motor (9; 49) is arranged to change the rotational speed of the centrifugal rotor (8) in response to a sensed change of said para-
10 meter in a way such that the gas pressure in the crankcase is maintained at a predetermined value, or within a predetermined pressure interval, during the operation of the combustion engine (31; 41).
10. A device according to claim 9, in which the driving motor (49) is
15 electric and a frequency converter (48) is connected between the sensing means (45) and the driving motor (49).
11. A device according to claim 9 or 10, in which the sensing means (45)
20 is arranged to sense a parameter that is related to the load to which the combustion engine (41) is subjected during its operation.